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PROCEEDINGS

OF

THE ROYAL IRISH ACADEMY.

1836-1837.

No. 2.

December 12.

RICHARD GRIFFITH, Esq., in the Chair.

A PAPER was read "On the Seals of Ireland, (Phocidæ.)" By Robert Ball, Esq., M. R. I. A.

The author stated the circumstances by which he was led to discover that the seal of most frequent occurrence on the Irish coast was not defined as a British species, together with the subsequent identification of that animal, by Professor Nilsson, as the Halichærus Griseus of his Scandinavian Fauna, (Phoca Gryphus of Fabricius,) found in the Baltic and North Sea. He asserted, however, that the habits of the Halichærus of this country differed so much from those ascribed to it in the Baltic, that it appeared to him not unlikely, on comparison, to prove a distinct species. He showed that the colour of the animal here varied so much from sex. age, season, &c. that it could not be considered of any value as a character of species in the present state of our knowledge of the subject. He alluded to the very small size of the brain compared with that of the genus Phoca, and stated that the intellectual powers bore the same proportion. Ball then proceeded to show that the simple form of the teeth of Halichærus (approaching closely to those of some species of Delphinus) furnished sufficient grounds for separating it from the genus Phoca; and observed, that the Halichærus may always be distinguished from other seals, by its straight profile, fierce aspect, and greater proportionate length. He mentioned the fact of his having discovered that the specimen in the British Museum, so long known as Donovan's Phoca Barbata, (and the long-bodied seal of Parsons,) is formed of the skin of a Halichærus improperly stuffed; and he noticed the mistakes to which this has given origin.

Mr. Ball next gave instances of the occurrence in this country of the Phoca Vitulina, (P. variegata Nils.) which he considered identical with the seal stated by Sir E. Home (Phil. Trans. 1822) to have been killed in the Orkneys, though it appears from the cranium figured as if a few teeth of the P. Groenlandica were inserted into the upper jaw. The author related some anecdotes of the interesting and beautiful specimen now in the Zoological Gardens; contrasted the species in structure and habits with the Halichærus; and expressed his dissent from the statement put forward in Mr. Bell's British Quadrupeds, on the authority of Professor Nilsson, that the oblique position of the molar teeth in P. Vitulina was a specific character of unerring value. He has shown, in fact, that the obliquity in question arose from the insufficient development of the jaws in early life, which contracted the space for the teeth; and that it disappeared long before the skull reached its maximum size, and partially occurred in the young Halichærus.

Mr. Ball then alluded to the seal taken in the Severn, which Professor Nilsson pronounced to be his Phoca Annellata; but which has since been stated, with the Professor's concurrence, to be the P. Groenlandica. He expressed his doubts as to the justness of this conclusion, observing that the Groenlandica was a large species, while the Severn seal was certainly a small one. He further showed that the form of the inter-maxillary bones, where they joined the nasal, was quite sufficient to distinguish it from the specimen figured by Sir E. Home, in the paper before referred to; and

he expressed his belief that the species was still to be determined.

The author concluded by stating his belief in the existence of a fourth seal (probably P. Barbata) on the southern coasts of Ireland, which he had occasionally seen, but never had opportunity of closely inspecting; and finally exhibited a number of sketches illustrative of his paper, showing generic and specific distinctions of external forms, skulls, teeth, cæca, and of the great sinuses of the hepatic veins.

Professor Kane laid before the Academy, specimens of the salts of a new acid, called by him "Xanthomethilic Acid."

The same gentleman stated some conclusions to which he had recently arrived, from the examination of pyroacetic spirit, which he considered to be a new alcohol.

DONATIONS.

Discours sur quelques Progrès des Sciences Mathematiques en France, depuis 1830. Par le Baron Charles Dupin, President de l'Académie. Presented by the Author.

Researches on Heat. (Second Series.) By James D. Forbes, Esq. F.R.SS.L.& E., F.G.S. Presented by the Author.

January 9, 1837.

Rev. B. LLOYD, D. D., Provost, T. C. D., President, in the Chair.

Matthew Barrington. Esq., Arthur E, Gayer, Esq., Sir John Kingston James, Bart., Francis Barker, M.D., William Gregory M.D., F.R.S.E., Edward A. Clarke, Esq., Charles Lambert, Esq., and Thomas Williams, Esq., were elected Members of the Academy.